

## **REMARKS**

Claims 1-31 are pending in the reissue application. Claims 1, 16-17, 21 and 25 are independent claims. Previously, claims 17-20, 25 and 29-31 have been amended in several particulars for purposes of clarity, brevity and accuracy, and to further avoid the recapture rule as previously presented in the Amendment filed on June 4, 2003. For example:

Independent claim 17 has been amended to define a display device comprising:

a display panel having a plurality of columns and a plurality of rows for displaying an image in accordance with display data; and  
a data driver coupled to said display panel, said data driver being arranged on a single side of said display panel, said data driver having an input terminal and a plurality of output terminals, each of said output terminals corresponding to each of at least a part of said columns of said display panel, said data driver including:  
a generator for generating a plurality of display voltages, **said display voltages including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales,**  
a selector for selecting one of said plurality of display voltages **in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data,** and  
an output circuit for outputting said selected one of said display voltages to said each of said output terminals;  
**wherein selected display voltages which correspond to adjacent two of said output terminals have different polarity from each other.**

Similarly, independent claim 21 has previously amended to only define a data driver for coupling to a display panel, having a plurality of columns and a plurality of rows for displaying an image in accordance with display data, said data driver being arranged on a single side of said display panel, and comprising:

a generator for generating a plurality of display voltages, **said**

display voltages including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales;  
a selector for selecting one of said plurality of display voltages in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data; and  
an output circuit for outputting said selected one of said display voltages to said each of said output terminals;  
wherein selected display voltages which correspond to adjacent two of said output terminals have different polarity from each other.

As expressly defined in base claims 17 and 21, the display voltages have now been defined to include a newly added limitation such as “including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales.” The selection of one of the display voltages has now been defined to include a newly added limitation such as “in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data.” In addition, selected display voltages have been added to correspond to adjacent two of said output terminals have different polarity.

These newly added narrowing limitations in the reissue claims 17 and 21 are not defined anywhere in each of the original base claims 1, 11 and 16 of U.S. Patent No. 5,774,106, and modify the claims such that the scope of the claims no longer results in a recapture of the alleged surrendered subject matter.

Alternatively, independent process claim 25 has previously amended to define a method of applying display voltages to a display panel that is different in scope of coverage from that of original process claim 16 of U.S. Patent No. 5,774,106. For example, claim 25 defines a method of applying display voltages to a display panel, having a plurality of columns and a plurality of rows for display an image in accordance with display data, and comprising the steps of:

providing an input terminal and a plurality of output terminals, said output terminals being coupled to said display panel, said output terminals being arranged on a single side of said display panel, each of said output terminals corresponding to each of at least a part of said columns of said display panel;

generating a plurality of display voltages, said display voltages including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales;

selecting one of said plurality of display voltages in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data;  
and

outputting said selected one of said display voltages to said each of said output terminals, thereby applying said selected one of said display voltages to said liquid crystal panel;

wherein selected display voltages which correspond to adjacent two of said output terminals have different polarity from each other.

Again, as expressly defined in base claims 25, the display panel has now been defined to include a newly added limitation such as “plurality of columns and a plurality of rows” and provided with “an input terminal and a plurality of output terminals, said output terminals being coupled to said display panel ... arranged on a single side of said display panel, each of said output terminals corresponding to each of at least a part of said columns of said display panel.”

The display voltages have now been defined to include a newly added limitation such as “including a set of positive and negative polarity gray scale voltages corresponding to each of gray scales.” The selection of one of the display voltages has now been defined to include a newly added limitation such as “in accordance with each of said display data and a horizontal position of each of said output terminals corresponding to each of said display data.” In addition, two of said selected one of said display voltages have been added to correspond to adjacent two of said output terminals have different polarity.

Again, these newly added narrowing limitations in the reissue claim 25 are **not** defined anywhere in each of the original base claims 1, 11 and 16 of U.S. Patent No. 5,774,106, and modify the claim such that the scope of the claim no longer results in a recapture of the alleged surrendered subject matter.

More importantly, recent case law pertaining to an improper recapture rule under 35 U.S.C. §251 clearly supports Applicants' claims 1-31 as pending in the instant application. For example, *Ex parte Eggert* (Appeal No. 2001-0790, Application No. 09/110145), which was decided on May 29, 2003 by the complete Board of Patent of Patent Appeals and Interferences, sets forth the legal standard for determining when an improper recapture rule can be invoked for reissue claims under 35 U.S.C. § 251.

As was acknowledged in *Ex parte Eggert*, the recapture rule "prevents a patentee from regaining through reissue the subject matter that he/she surrendered in an effort to obtain allowance of the original claims." However, the patentee is free to acquire, through reissue, claims that are narrower in scope than the canceled claims. As a result, the proper focus for determining whether an improper recapture rule can be invoked is on the scope of the claims, and not on the individual feature or element purportedly given up during prosecution of the original application. According to *Eggert*, the following principles will be followed when invoking the improper recapture rule:

- (1) If the reissue claim is as broad or broader than the canceled or amended claim [the surrendered subject matter] in all aspects, the recapture rule bars the claims;
- (2) If it is narrower [than the surrendered subject matter] in all aspects, the recapture rule does not apply, but other rejections are possible;
- (3) If the reissue claim is broader [than the surrendered subject matter] in some aspects, but narrower [than the surrendered subject matter] in other aspects, then: (a) If the reissue claim is as broad as or broader than an aspect germane to a

prior art rejection, but narrower in other aspect completely unrelated to the rejection, the recapture rule bars the claims; (b) If the reissue claim is narrower in an aspect germane to a prior art rejection, and broader in an aspect unrelated to the rejection, the recapture rule does not bar the claim.

Again, the main focus is on the scope of the claims, and not on the individual feature or element purportedly given up during prosecution of the original application. Therefore, if the reissue claim is narrower in scope with respect to the canceled or amended claim, the recapture rule does not apply.

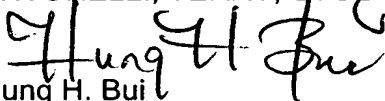
In the present situation, the newly added base claims 17, 21 and 25 have been amended to contain limitations that are narrower in an aspect germane to a previously stated prior art rejection, but are broader in other aspects unrelated to the rejection, for reasons discussed above. As a result, when the rules and principles advanced by *Ex parte Eggert* are applied to the reissue claims 17, 21 and 25 as pending in the instant application, the improper recapture rule does not apply. Moreover, in view of the foregoing explanations and distinctions between the subject matter of newly added base claims 17, 21 and 25 relative to the original base claims 1, 11 and 16 of U.S. Patent No. 5,774,106, Applicants respectfully request that the rejection of claims 17-28 under 35 USC 251 be withdrawn.

In view of the foregoing amendments, arguments and remarks, all claims 1-31 are deemed to be allowable and this application is believed to be in condition to be passed to issue. Should any questions remain unresolved, the Examiner is requested to telephone Applicants' attorney at the Washington DC area office at (703) 312-6600.

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, or any extension of time fees, or credit any overpayment of fees, to the deposit account of Antonelli, Terry, Stout & Kraus, LLP, Deposit Account No. 01-2135 (500.33793R00).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

  
Hung H. Bui  
Registration No. 40,415

HHB  
(703) 312-6600